34353

NUS CORPORATION
1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

SISB/SAS 86-12-9-16

2-15-90
NFRAP
Janice P Thomas

December15, 1989

Mr. A. R. Hanke
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Subject: Preliminary Assessment
Battlefield Parkway Ammo Dump
Ft. Oglethorpe, Catoosa County, Georgia
TDD No. F4-8911-22
EPA ID No. GAD981931322
Revision 0

Dear Mr. Hanke:

Enclosed please find two copies of the Preliminary Assessment for Battlefield Parkway Ammo Dump located in Ft. Oglethorpe, Georgia.

If you have any questions or comments, please contact me at NUS Corporation.

Very truly yours,

Greg Thomas
Project Manager

Approved:

GT/dwf

Enclosures (2)

PRELIMINARY ASSESSMENT

REVISION 0

Date: December 1, 1989

Prepared: Greg Thomas
NUS Corporation, FIT 4; Atlanta, Georgia

Site: Battlefield Parkway Ammo Dump
Georgia Route 2
Ft. Oglethorpe, Catoosa County, Georgia
EPA ID No. GAD981931322
TDD No. F4-8911-22

Recommendation and Justification

FIT 4 recommends that no further remedial action be planned for Battlefield Parkway Ammo Dump. This recommendation is based on the lack of a significant number of targets within a 4-mile radius of the dump and the fact that the area is now allegedly clean.

Site History

The Battlefield Parkway Ammo Dump is located on the north side of Battlefield Parkway (Georgia Route 2) about 1 mile inside the Fort Oglethorpe city limits (Ref. 1, p. 1). The geographic coordinates are 34°57'20"N latitude and 85°15'05.0"W longitude (Ref. 2). The area of the dump is now occupied by a mini-storage facility and an oil-change garage (Ref. 3). Fort Oglethorpe was a U.S. Army Post from 1903 until about 1950. During construction of the mini-storage facility and the oil-change garage, on March 10, 1988, a bulldozer uncovered old ammunition and about 25 small bottles containing chemicals. The EPA was notified and an investigation was conducted the same day. An EM-31 survey of the dump area showed nothing significant (Ref. 1, pp. 1-3).

Waste Characteristics

The ammunition, which consisted of 30- and 50- caliber shells, was taken to Fort Gillem for analysis by Sgt. Krieger of the Emergency Ordnance Division. It was determined that the ammunition could have been World War I issue. On March 15, 1988, EPA's Emergency Response Contracting Service (ERCS) contractor sampled the crystals from the bottles and ran a classification analysis. It was determined

that the crystals could be a silonizing agent made of an organic chloride. The vapors emitted by the crystals were hydrogen chloride (Ref. 1, pp. 2-4).

On March 28, 1988, EPA's Technical Assistance Team (TAT) and ERCS dug a reaction hole, lined it with lime, and had a backhoe break the bottles so the chemicals could be neutralized. Then, the contaminated soil was drummed for disposal. Six test holes measuring 3' x 3' x 6' were excavated to determine if more bottles or ammunition would be found. Only undisturbed soil was found (Ref. 1, pp. 4-6).

Groundwater Pathway

The Battlefield Parkway Ammo Dump is in the Valley and Ridge Physiographic Province, which consists of complexly folded and faulted sedimentary rocks. Groundwater occurs in interconnected openings in the bedrock. The aquifer in this area is the unconfined limestones of the Chickamauga Supergroup, the Newala Limestone, and the Knox Group. These formations are interconnected and have a total thickness of about 4000 feet. Groundwater in this area occurs at about 45 feet below land surface (Ref. 4, plates 1, 6, and 14). Hydraulic conductivity values for the aquifer range from 1×10^{-3} to 1×10^{-5} cm/sec (Ref. 5, p. 29). The net annual rainfall for this area is 13 inches and the 1-year, 24-hour rainfall is 3.25 inches (Ref. 6, pp. 37, 63; 7, p. 93).

Residents within a 4-mile radius of the Battlefield Parkway Ammo Dump are provided water by one of four municipal water systems: the Catoosa County water system, the Tennessee-American water company, the Walker County water system, or the Ft. Oglethorpe water system. None of these water systems have groundwater wells within a 4-mile radius of the dump (Ref. 8, 9, 10, 11). No residents within a 4-mile radius of the dump are believed to obtain water from private wells (Ref. 3).

Surface Water Pathway

Runoff from the dump would flow 0.4 mile east into Black Branch then 1.6 miles north into Spring Creek, which flows 2.6 miles north into West Chickamauga Creek then 0.7 mile north into South Chickamauga Creek, which flows north for the remainder of the 15-mile migration pathway (Ref. 2). There are no potable water intakes within 15 downstream miles of the dump (Ref. 8, 9, 10, 11). Waters of this area have been classified as primary or secondary trout waters (Ref. 12, p. 7). No critical habitats for threatened or endangered species have been designated in this area (Ref. 13).

Air Pathway

The air pathway is not of concern, since the hazardous chemicals have been removed from the area (Ref. 1, p. 6).

HRS2 Concerns

During an offsite reconnaissance, it was noted that the dump area is now almost completely paved over and is occupied by a mini-storage facility and an oil-change garage. The nearest residence is a nursing home located about 500 feet to the north. The nearest school is located about 3500 feet to the north (Ref. 3).

REFERENCES

1. After Action Report, Emergency Removal Action for Battlefield Parkway Ammo Dump (U.S. Environmental Protection Agency, Region IV, Atlanta, Georgia).

2. U.S. Geological Survey, 7.5 minute series Topographic Maps: Chattanooga, Tennessee 1969 (Photorevised 1976), East Chattanooga, Tennessee 1969 (Photorevised 1976), East Ridge, Tennessee-Georgia 1982, Fort Oglethorpe, Georgia-Tennessee 1982, scale 1:24,000.

3. NUS Field Logbook No. F4-1863 for Battlefield Parkway Ammo Dump, TDD No. F4-8911-22. Documentation of site reconnaissance, November 28, 1989.

4. Ram Arora, Hydrogeologic Evaluation for Underground Injection Control in North Georgia, Hydrologic Atlas 12 (Georgia Department of Natural Resources, Atlanta 1984).

5. R.A. Freeze and J.A. Cherry, Groundwater (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979).

6. U.S. Department of Commerce, Climatic Atlas of the United States, (Washington, D.C.: GPO, June 1968) Reprint: 1983, National Oceanic and Atmospheric Administration.

7. U.S. Department of Commerce, Rainfall Frequency Atlas of the United States, Technical Paper Number 40 (Washington, D.C.: GPO, 1961).

8. Rebecca Swanson, Catoosa County Water System, telephone conversation with Greg Thomas, NUS Corporation, November 21, 1989. Subject: Distribution and source of water for residents in Catoosa County, Georgia.

9. Sandra Smith, Tennessee-American Water Company, telephone conversation with Greg Thomas, NUS Corporation, November 21, 1989. Subject: Distribution and source of water for residents in Chattanooga, Tennessee, and north Walker and Catoosa counties, Georgia.

10. A.H. Wellborn, Walker County Water Department, telephone conversation with Greg Thomas, NUS Corporation, November 21, 1989. Subject: Distribution and source of water for residents in Walker County, Georgia.

11. Albert Williams, Ft. Oglethorpe Utilities, telephone conversation with Greg Thomas, NUS Corporation, November 21, 1989. Subject: Distribution and source of water for residents in Ft. Oglethorpe, Georgia.

12. Georgia Department of Natural Resources, Water Availability and Use-Tennessee River Basin (December 1986).

13. U.S. Fish and Wildlife Service, Endangered and Threatened Species of the Southeastern United States (Atlanta, Georgia: 1988).

CERCLA ELIGIBILITY QUESTIONNAIRE

Site Name: Battlefield Parkway Ammo Dump

City: Ft. Oglethorpe State: GA

EPA I.D. Number: GAD981931322

I. CERCLA ELIGIBILITY	YES	NO
Did the facility cease operations prior to November 19, 1980?	✓	

If answer YES, STOP, facility is probably a CERCLA site
If answer NO, Continue to Part II

II. RCRA ELIGIBILITY	YES	NO
Did the facility file a RCRA Part A application?		
If YES:		
1) Does the facility currently have interim status?		
2) Did the facility withdraw its Part A application?		
3) Is the facility a known or possible protective filer? (facility filed in error)		
4) Type of facility: Generator___ Transporter___ Recycler___ TSD (Treatment/Storage/Disposal)___		
Does the facility have a RCRA operating or post closure permit?		
Is the facility a late (after 11/19/80) or non-filer that has been identified by the EPA or the State? (facility did not know it needed to file under RCRA)		

If all answers to questions in Part II are NO, STOP, the facility is a CERCLA eligible site.

If answer to #2 or #3 is YES, STOP, the facility is a CERCLA eligible site.

If #2 and #3 are NO and any OTHER answer is YES, site is RCRA, continue to Part III.

III: RCRA SITES ELIGIBLE FOR NPL	YES	NO
Has the facility owner filed for bankruptcy under federal or state laws?		
Has the facility lost RCRA authorization to operate or shown probable unwillingness to carry out corrective action?		
Is the facility a TSD that converted to a generator, transporter or recycler facility after November 19, 1980?		

RECONNAISSANCE CHECKLIST FOR HRS2 CONCERNS

Instructions: Obtain as much "up front" information as possible prior to conducting fieldwork. Complete the form in as much detail as you can, providing attachments as necessary. Cite the source for all information obtained.

Site Name: Battlefield Parkway Ammo Dump
City, County, State: Ft. Oglethorpe / Catoosa County / GA
EPA ID No.: GAD981931322
Person responsible for form: Greg Thomas
Date: 12-4-89

Air Pathway

Describe any potential air emission sources onsite: none

Identify any sensitive environments within 4 miles: population within 4-mile radius is about 54,193 (from GEMS program)

Identify the maximally exposed individual (nearest residence or regularly occupied building - workers do count): nearest residence is located 900 feet to the north

Groundwater Pathway

Identify any areas of karst terrain: none

Identify additional population due to consideration of wells completed in overlying aquifers to the AOC: none

Do significant targets exist between 3 and 4 miles from the site? No

Is the AOC a sole source aquifer according to Safe Drinking Water Act? (i.e. is the site located in Dade, Broward, Volusia, Putnam, or Flagler County, Florida): No

Surface Water Pathway

Are there intakes located on the extended 15-mile migration pathway? No

Are there recreational areas, sensitive environments, or human food chain targets (fisheries) along the extended pathway? Yes, recreational fishing in waters of this area.

Onsite Exposure Pathway

Is there waste or contaminated soil onsite at 2 feet below land surface or higher? No

Is the site accessible to non-employees (workers do not count)? Site is now the location of a mini-storage facility and an oil change garage. Mostly paved over.
Are there residences, schools, or day care centers onsite or in [redacted] proximity? Nearest school is located 3500 feet to the north. Day care center located 500 feet to the west.
Are there barriers to travel (e.g., a river) within one mile? No

Reference No. 1

BATTLEFIELD PARKWAY AMMO DUMP
FT. OGLETHORPE, CATOOSA COUNTY
GEORGIA

AFTER ACTION REPORT
EMERGENCY REMOVAL ACTION

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV
ATLANTA, GEORGIA

EPA

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Annex C - Log Notes - TAT Personal Log
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Annex G - Table of Witnesses
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I. INTRODUCTION

The U. S. Environmental Protection Agency in Region IV initiated an emergency removal action at a construction site in Fort Oglethorpe, Georgia, on 28 March 1988. The site contained approximately twenty-five small bottles of unknown chemicals.

II. BACKGROUND

Fort Oglethorpe was a U.S. Army Post from 1903 until approximately 1950. It was used by the 6th Cavalry until 1941. During this time, the cavalry divisions started changing to a motorized cavalry. Prisoners of WWI were held at Fort Oglethorpe in 1917 by the 17th Infantry Regiment.

The Chicamauga National Historic Battlefield was set up in 1933 by the Department of the Interior. The National Park encompassed a section of the post, and was under Army control until the Army relinquished authority to the Department of the Interior in 1947.

In 1941, Fort Oglethorpe was used by the Provost Marshal and, in 1943, it was utilized as a WAC training center until the fort closed.

After the fort's closing around 1950, the surrounding community retained the name and is known as Fort Oglethorpe, Georgia.

III. SITE DESCRIPTION

The site is located on the northside of Battlefield Parkway (Ga. Hwy 2) approximately one mile inside the Fort Oglethorpe city limits. It is located in a commercial residential area, bordered by an Ace Hardware store to the east, a nursing home on the

north, a medical clinic and a day care center on the west, and a shopping center to the south (Figure 2 - Site Location Map). The site covered a total area of 2 acres, but the area of concern was only 0.15 acres (Figure 3 - Site Diagram).

IV. SUMMARY OF EVENTS

During construction of self-storage units and an automobile lubrication facility on a lot in Fort Oglethorpe, Georgia, old ammunition and small bottles of chemicals were uncovered. When a bulldozer hit the bottles, white smoke was emitted. The operator notified the local officials who, in turn, notified the EPA in Region IV on 10 March 1988. OSC Kelly McCarty responded.

Working with OSC McCarty on-site were John Morgan, State of Georgia EPD, and Sgt. Kreger, Emergency Ordnance Division, Fort Gillam. Sgt. Krieger took the 30 and 50 caliber shells back to Fort Gillam for analysis.

EPA's Technical Assistance Team (TAT) comprised of Clyde Johnston, Karen Jarrett-Gill and Will Lucas arrived on-site at 1600 hours, 10 March 1988, to conduct a site investigation. TAT conducted a level B site entry to determine characteristics of the chemicals. There were approximately twenty-five bottles containing a black liquid. The 3 to 4 oz. bottles were clear glass with corks and black resin caps. One bottle was open to the atmosphere giving off white vapors and leaving a yellow residue. The pH of the crystals was 0-1. Bottles that had been open to the air for an extended period of time had a greenish-purple tint. No readings above background were obtained on the

HNu Photoionization Detector, combustible gas indicator, or radiation meter.

TATM Johnston conducted an EM-31 survey of the site. Results of the survey showed nothing significant in the area of concern or elsewhere on the site (Annex A - Log Notes - Emergency Response).

At the request of OSC McCarty, TAT built a containment shelter to place over the bottles. The shelter was constructed with a plastic cover to protect against rain and contain the vapors.

TATM Jarrett-Gill was tasked to establish a) the identity or classification of the chemicals and b) determine whether or not an ammunition or chemical dump had previously existed at the old post. It was speculated that the unknown chemical might be picric acid or picric chloride. Picric acid would exhibit the same characteristics observed, ie. white vapors and yellow crystals. However, picric acid is a clear liquid. Steven Auberts, explosives expert at Eglin AFB, stated that picric acid or chloride could have oxidized and turned black over the years. Its use by the Army dated back to WWI. The ammo found in the vicinity of the bottles could have been WWI issue according to Sgt. Krieger, EOD, and Stan Mitchell, Forces Command, Fort McPherson. Steven Auberts stated the yellow crystals were highly explosive if the chemical was picric acid.

TATM Jarrett-Gill contacted Will Mahoney at the National Military Archives in Washington, D.C. Through a files search on Fort Oglethorpe, Mr. Mahoney obtained a memo from the Adjutant

General's Office dated 24 October 1941 which stated the need for fencing of three critical areas: 1) magazine area, 2) water tank area, 3) ordnance warehouse area. This memo established the existence of an ammunitions dump and an explosives warehouse. (Annex D - Record of Communication Received - The Adjutant General's Office (dated October 24,1941))

For a more detailed chronology of events concerning the acquisition of information, please see Annex C.

A Regional Response Team (RRT) meeting was held on 14 March 1988 at 1000 hours. Agencies involved with the Battlefield Parkway Ammo Dump site included; EPA, DOD, ATSDR, FEMA, Army Corp of Engineers, etc. At that time, it was determined that security should be established immediately at the site.

On 15 March 1988, EPA's Emergency Response Contracting Service contractor sampled the crystals and ran a classification analysis. ERCS determined the substance could be a silonizing agent made up of an organic chloride. The vapors emitted were HCL and had a pH of 3.8. The agent reacts to form a low pH substance.

A meeting was held on-site on 18 March 1988. It was decided that an immediate removal would be initiated on 28 March 1988. The bottles would be removed and test holes would be excavated to determine if more bottles or ammunition would be found.

On 28 March 1988, EPA, TAT, and ERCS mobilized to the site (Annex E - Photograph #1). OSC McCarty had obtained further

possibilities for the identification of the chemicals. A retired veterinarian speculated that it could be an expectorant for horses made up of creosote and ammonium chloride, or it could be a dressing used to treat thrush in horses hooves.

The owner of the property, Jack Kidd, came on site at 1555 hours. Mr. Kidd informed OSCs McCarty and Rigger that the back section of the property had been excavated 2 1/2 - 3 feet and backfilled to obtain a sound base for construction. OSC McCarty stated that there was no need for EPA to excavate the back section. She assured Mr. Kidd that the areas of excavation would be restored to its original condition. The soil would be replaced and compacted. The construction contractor, Bob Bertillini came on-site at 1605 hours. He informed the OSCs that there was no need to use a sheep's foot compactor over the excavated areas. He also stated that the lot was covered with trees when construction started. Some of the trees were 45 inches in diameter. OSC McCarty stated that the trees would have been too old for the site area to have been the dump. Therefore, she speculated that the chemicals were an isolated instance.

Excavation started at 0800 hours on 29 March 1988. The ERCS operator made six discrete excavation holes 3' x 3' x 6' (Figure 3 - Site Sketch). Nothing was found. All areas contained undisturbed soil.

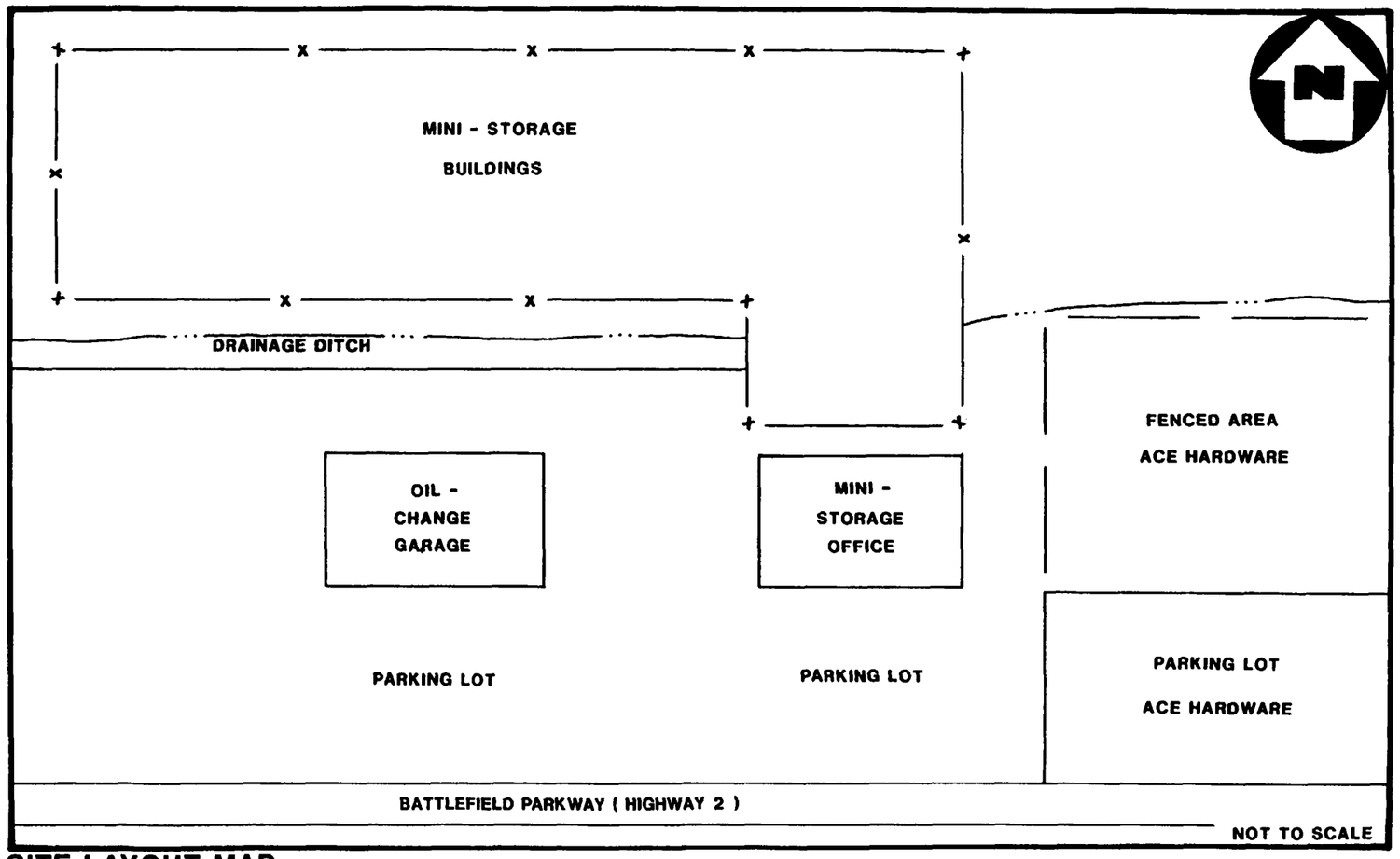
ERCS Chemist, Kevin Simmons, examined the bottles in level C protection at 0930 hours. Upon breaking one of the bottles, Simmons noted that the chemical was reacting with the soil, not

the air (Annex E - Photograph #2). The pH increased upon reaction. In his professional opinion, a reaction hole should be dug, lined with lime, and have the backhoe break the bottles so the chemicals could react (Annex E - Photographs #3, 4, 5, 6, & 7). Then everything, including the contaminated soil, could be drummed for disposal. OSCs McCarty and Rigger concurred with this decision.

By 1100 hours, the bottles had been broken and the contaminated soil drummed (Annex E - Photographs #8, 9 & 10). During the procedure, billows of white vapors were emitted from the reaction hole. Simmons stated that the disposal profile sheet could read contaminated soil that has been neutralized. OSC determined that no further analysis was necessary. Secured drum was left on-site for future disposal. The entire removal was completed by 1215 hours.

OVERSIZED

DOCUMENT



SITE LAYOUT MAP
BATTLEFIELD PARKWAY AMMO DUMP
FT. OGLETHORPE, CATOOSA COUNTY, GEORGIA

NUS CORPORATION

OVERSIZED

DOCUMENT

Reference No. 5

R. Allan Freeze

Department of Geological Sciences
University of British Columbia
Vancouver, British Columbia

John A. Cherry

Department of Earth Sciences
University of Waterloo
Waterloo, Ontario

GROUNDWATER

Prentice-Hall, Inc.
Englewood Cliffs, New Jersey 07632

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Table 2.2 Range of Values of Hydraulic Conductivity and Permeability

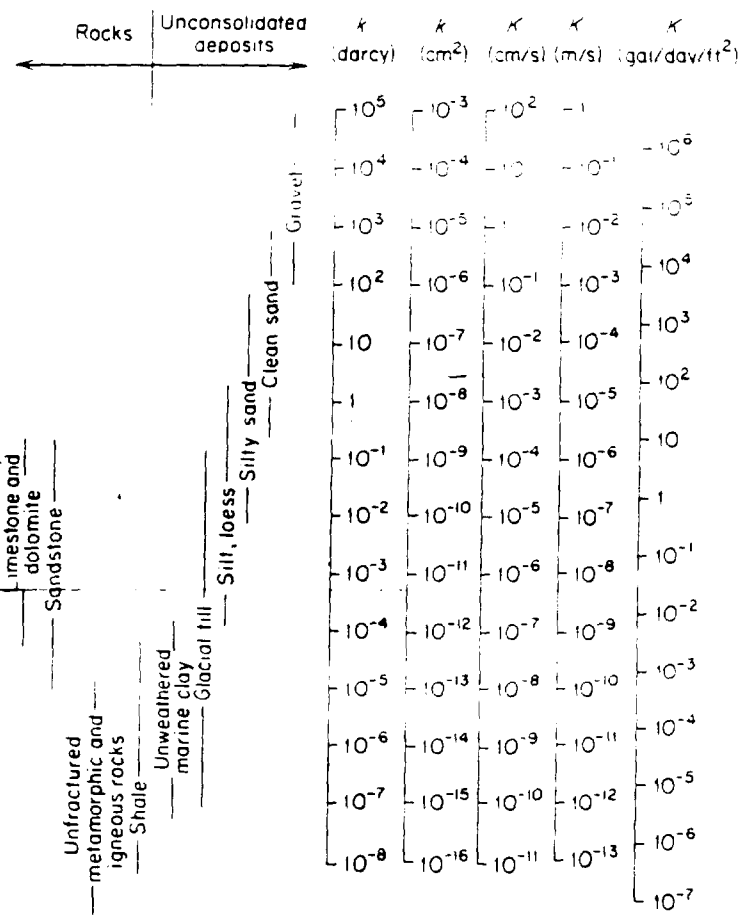


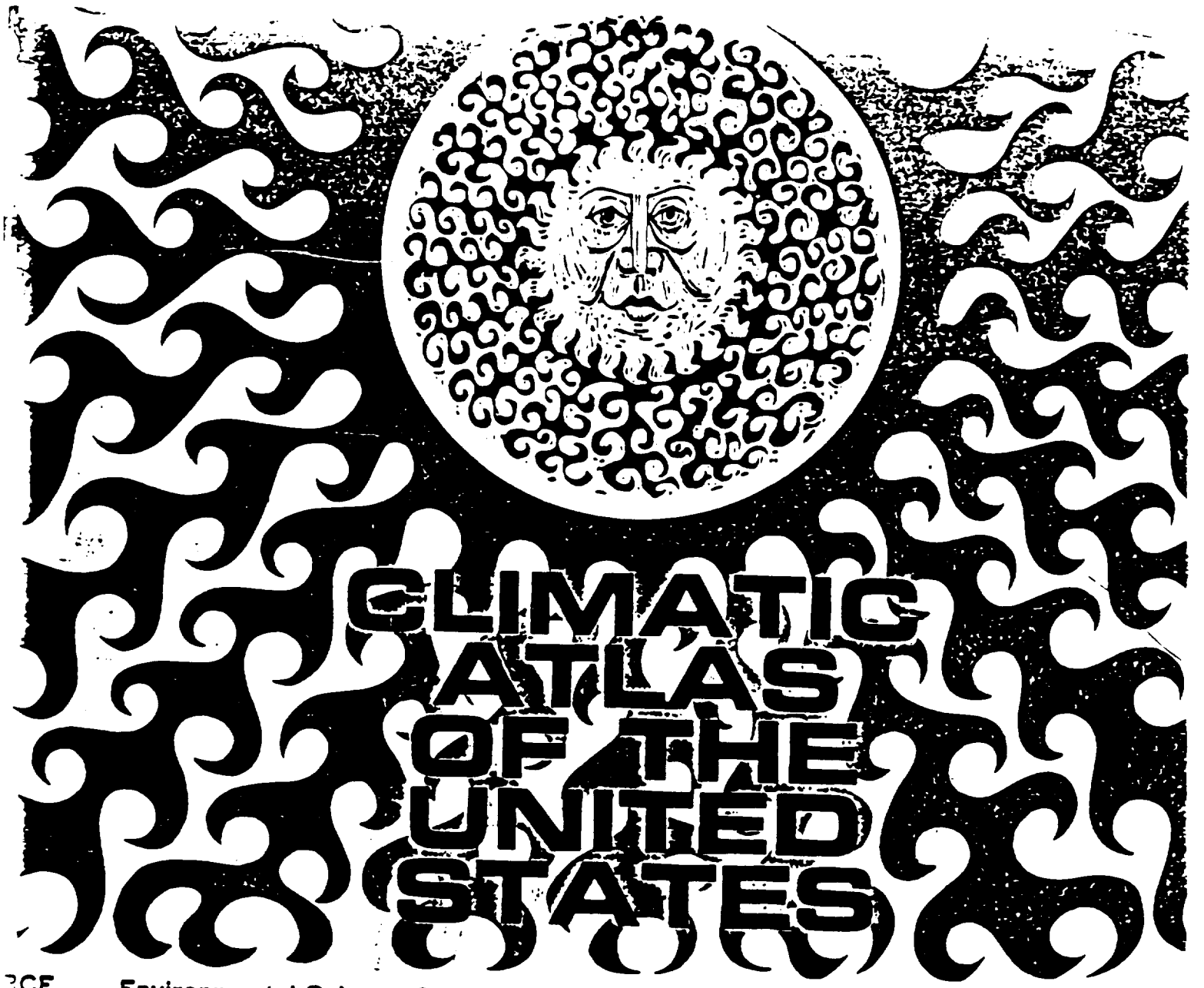
Table 2.3 Conversion Factors for Permeability and Hydraulic Conductivity Units

	Permeability, k*			Hydraulic conductivity, K		
	cm²	ft²	darcy	m/s	ft/s	U.S. gal/day/ft²
cm²	1	1.08×10^{-3}	1.01×10^{8}	9.80×10^{2}	3.22×10^{3}	1.85×10^{9}
ft²	9.29×10^{2}	1	9.42×10^{10}	9.11×10^{5}	2.99×10^{6}	1.71×10^{12}
darcy	9.87×10^{-9}	1.06×10^{-11}	1	9.66×10^{-6}	3.17×10^{-5}	1.82×10^{1}
m/s	1.02×10^{-3}	1.10×10^{-6}	1.04×10^{5}	1	3.28	2.12×10^{6}
ft/s	3.11×10^{-4}	3.35×10^{-7}	3.15×10^{4}	3.05×10^{-1}	1	6.46×10^{5}
U.S. gal/day/ft²	5.42×10^{-10}	5.83×10^{-13}	5.49×10^{-2}	4.72×10^{-7}	1.55×10^{-6}	1

*To obtain k in ft², multiply k in cm² by 1.08×10^{-3}.

Freeze, R.A., and J.A. Cherry, "Groundwater," Prentice-Hall, Inc., Englewood Cliffs, NJ, 1979

Reference No. 6



RCE . Environmental Science Services Administration . Environmental Data Service

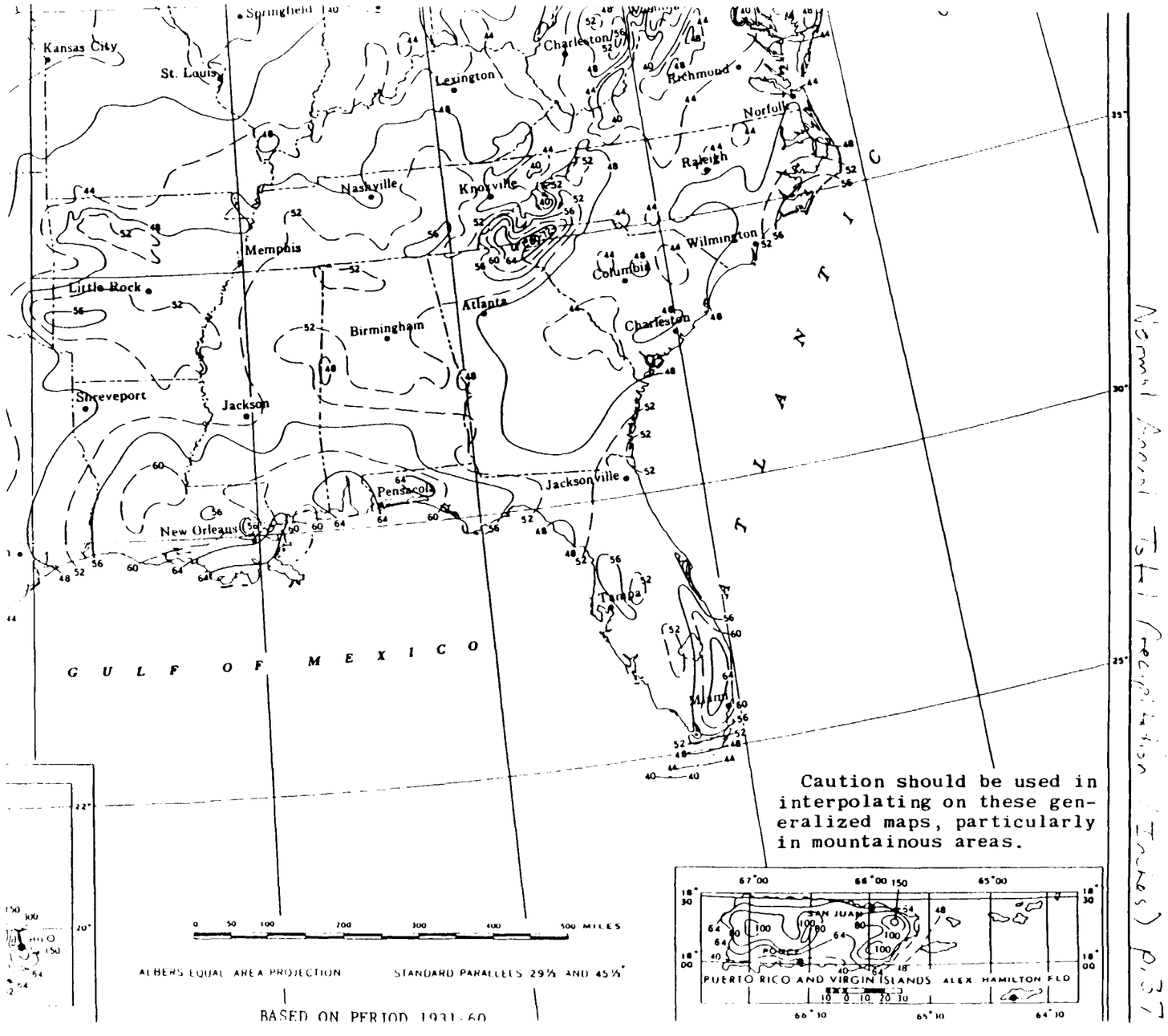
U.S. DEPARTMENT OF COMMERCE
C. R. Smith, Secretary

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
Robert M. White, Administrator

ENVIRONMENTAL DATA SERVICE
Woodrow C. Jacobs, Director

JUNE 1968

REPRINTED BY THE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
1983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Kansas City
St. Louis
Lexington
Charleston
Richmond
Norfolk
Raleigh
Nashville
Knoxville
Memphis
Wilmington
Columbia
Little Rock
Atlanta
Charleston
Birmingham
Shreveport
Jackson
Jacksonville
Pensacola
New Orleans
Tampa
GULF OF MEXICO
ATLANTIC
Caution should be used in interpolating on these generalized maps, particularly in mountainous areas.
0 50 100 200 300 400 500 MILES
ALBERS EQUAL AREA PROJECTION
STANDARD PARALLELS 29½ AND 45½°
BASED ON PERIOD 1931-60
PUERTO RICO AND VIRGIN ISLANDS
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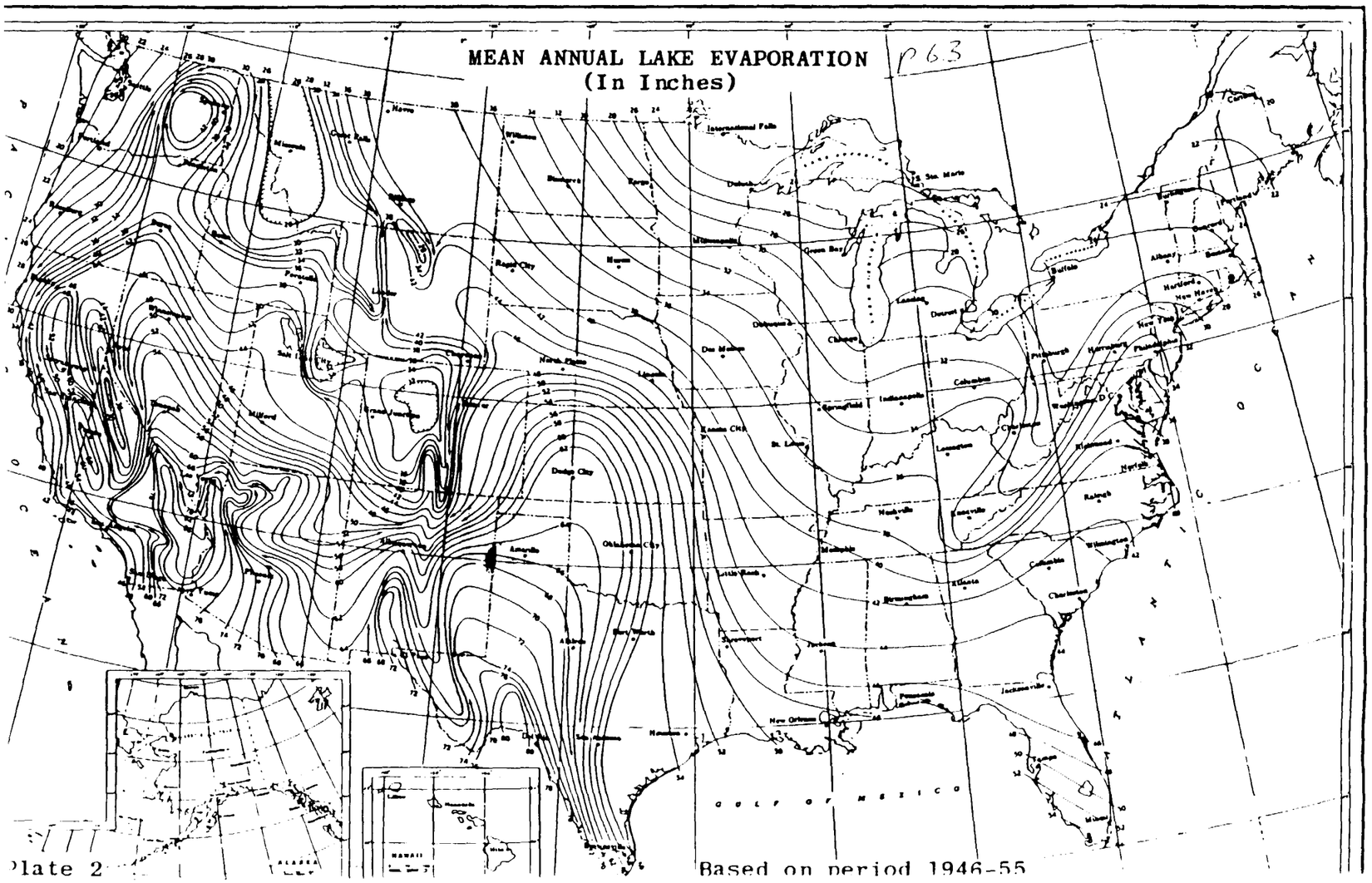


Plate 2

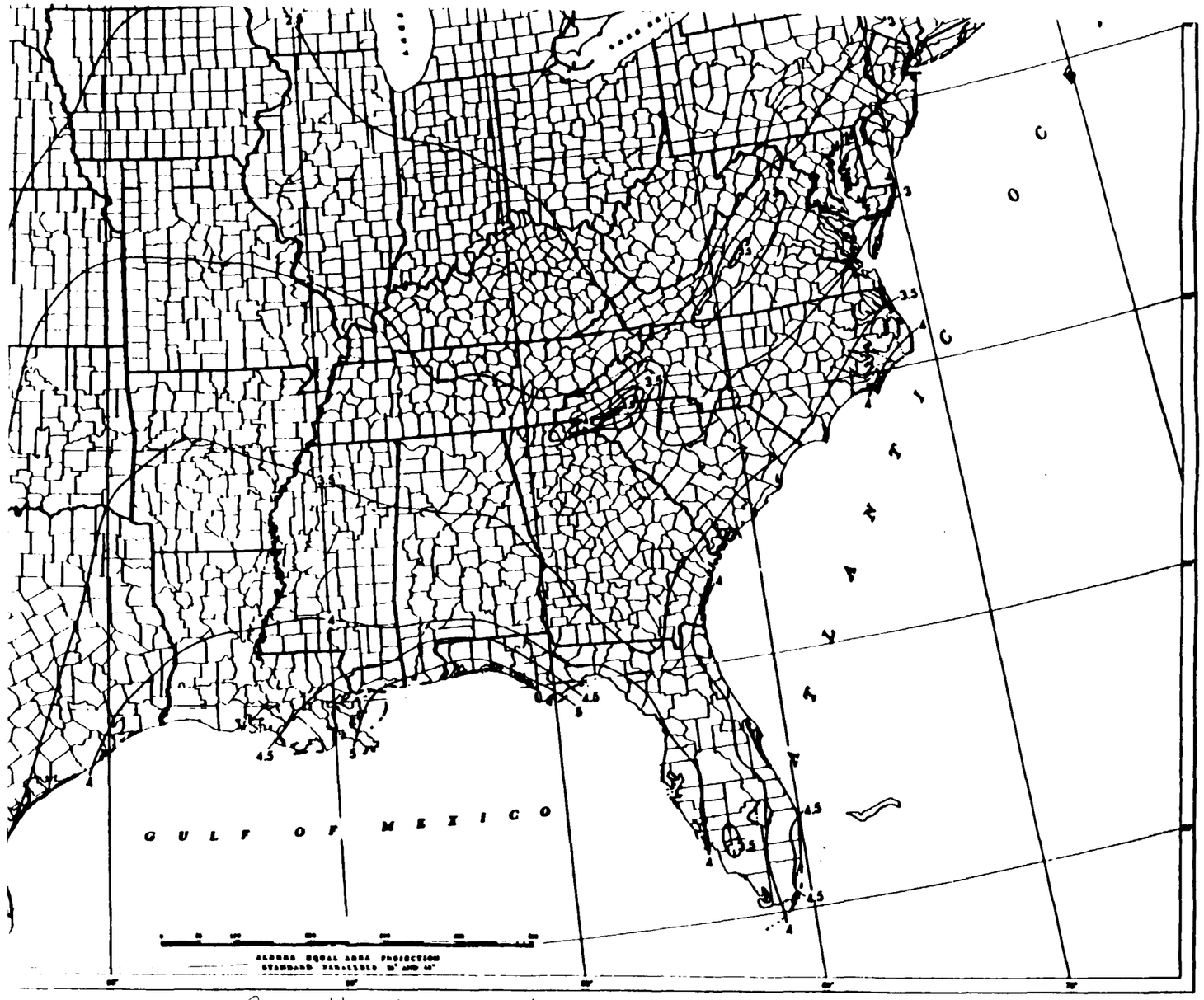
Based on period 1946-55

TECHNICAL PAPER NO. 40

RAINFALL FREQUENCY ATLAS OF THE UNITED STATES

for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years

Prepared by
DAVID M. HERSHFIELD
Cooperative Studies Section, Hydrologic Services Division
for
Engineering Division, Soil Conservation Service
U.S. Department of Agriculture



Rainfall Frequency Atlas

NUS CORPORATION AND SUBSIDIARIES		*TELECON NOTE*
	Reference No. 8	
CONTROL NO.	**DATE:** 11-21-89	**TIME:** 1500
DISTRIBUTION:		
BETWEEN: Rebecca Swanson	**OF:** Catoosa County Water System	**PHONE:** (404) 937-4121
AND: Greg Thomas, NUS Corporation		

DISCUSSION:

Catoosa County Water System provides water to all of rural Catoosa County area around Ft. Oglethorpe. Has 8338 connections. Obtain water from Yeates Spring off of State Hwy. 151 in southern part of county. Office is located 5 miles north of Ringgold on Hwy. 41.

NUS CORPORATION AND SUBSIDIARIES **TELECON NOTE**

Reference No. 9

CONTROL NO.	DATE: 11-21-89	TIME: 1600
DISTRIBUTION:		
BETWEEN: Sandra Smith	OF: Tennessee-American Water Co.	PHONE: (615) 755-7600
AND: Greg Thomas, NUS Corporation		

DISCUSSION:

Provide water to all of Chattanooga, TN Rossville and Lakeview, Georgia. Water supply is Tenneessee River. Office located at 1101 Broad Street next door to library and TVA Complex.

NUS CORPORATION AND SUBSIDIARIES		TELECON NOTE
	Reference No. 10	
CONTROL NO.	**DATE:** 11-21-89	**TIME:** 1610
DISTRIBUTION:		
BETWEEN: A. H. Wellborn	**OF:** Walker Co. Water & Sewer Dept.	**PHONE:** (404) 820-1455
AND: Greg Thomas, NUS Corporation		

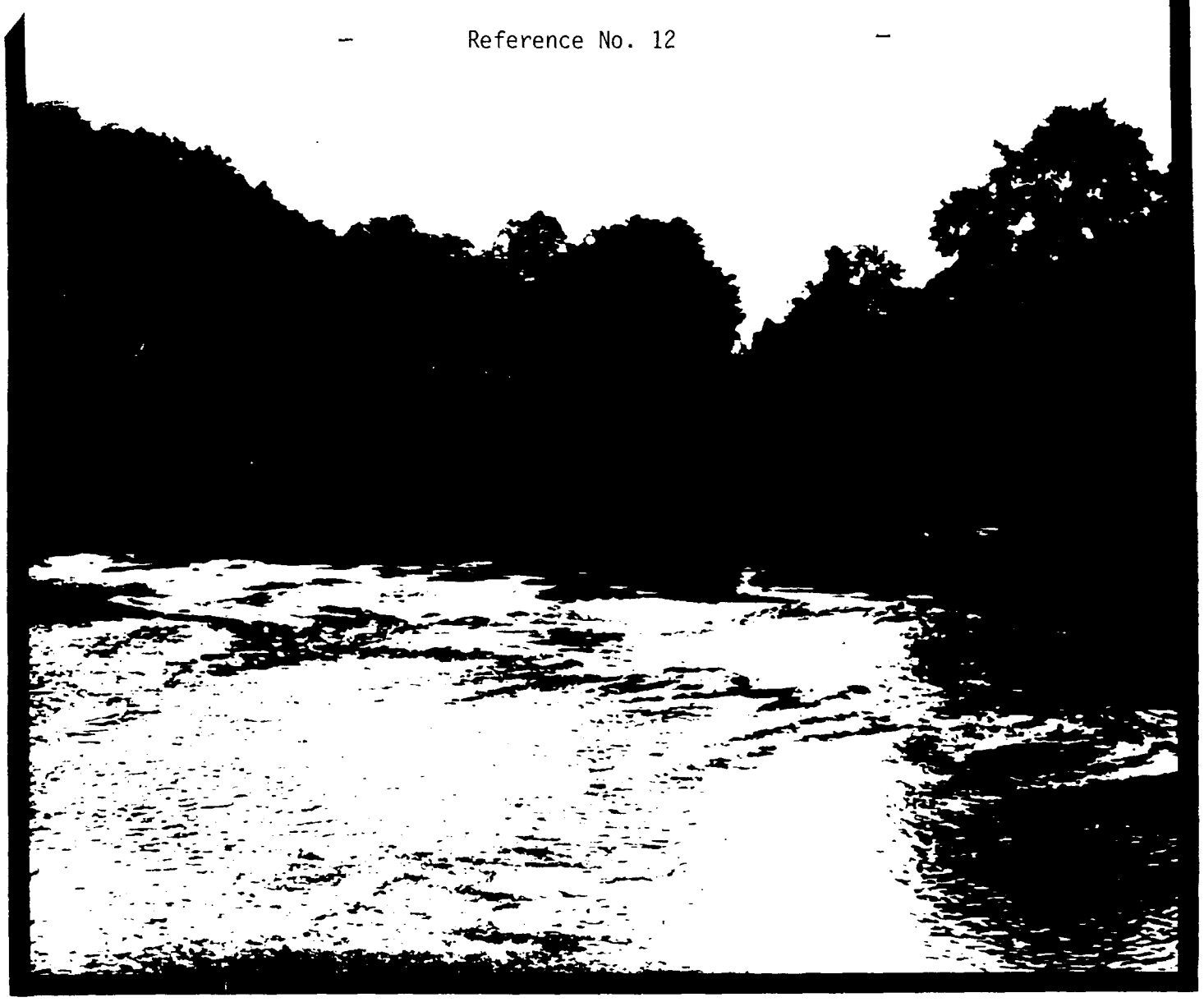
DISCUSSION:

Office in Flintstone, Georgia, rovides water to all of NE Walker Co. that Tennessee-American doesn't provide for. Supplied by 3 wells in Chickamauga on the Coke Oven property. Also supplied by surface water from Crawfish Springs Lake south of Chickamauga.

NUS CORPORATION AND SUBSIDIARIES		TELECON NOTE
	Reference No. 11	
CONTROL NO.	**DATE:** 11-21-89	**TIME:** 1515
DISTRIBUTION:		
BETWEEN: Albert Williams	**OF:** Ft. Oglethorpe Utilities	**PHONE:** (404) 866-0962
AND: Greg Thomas, NUS Corporation		

DISCUSSION:

Ft. Oglethorpe obtains water from the Catoosa County Water System. Provides water to city of Ft. Oglethorpe only. Office located at dead end of Howard Dr.



Water Availability & Use
Tennessee River Basin

Georgia Department of Natural Resources
Environmental Protection Division

FINAL

DRAFT

WATER AVAILABILITY AND USE REPORT

TENNESSEE RIVER BASIN

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

DECEMBER 1986

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These economic activities in the basin create modest demands for water use. Other industrial and urban activitity also require water supplies. Agriculture uses little water for crop irrigation or for livestock watering at this time.

Water Quality in the Tennessee River Basin

Some of the tributary streams of the Tennessee River originate in the north Georgia mountains. These small tributary streams make up the total surface water available to the Tennessee River Basin that is within Georgia. The tributary streams include Little Tennessee River, Hiawassee River, Nottely River, Toccoa River, South Chickamauga and Lookout Creek.

The Environmental Protection Division (EPD) has classified State waters as to use and has established criteria applicable to each water use classification. Waters of the Tennessee River Basin have been generally classified as "primary or secondary trout waters". Primary trout streams are those in which trout naturally reproduce, while secondary trout streams are those in which trout do not reproduce but in which they will survive throughout the year.

The EPD and its predecessor agency, the Georgia Water Quality Control Board, have conducted intensive and special investigations of Georgia streams since 1965. Five active trend monitoring stations exist from which monthly samples are analyzed. Data from these sources are used in this account of water quality.

Surface and ground water quality in the Dillard vicinity are both generally good. Surface water quality typically meets established standards. Slight reductions in surface water quality resulting from wastewater treatment plant discharges and agricultural operations in Georgia have been observed in the Little Tennessee River near the Georgia/Tennessee state line.

Macroinvertebrate and water samples were collected from the Little Tennessee River on June 4, 1986, at the Georgia/North Carolina state line. Although the macroinvertebrate community was not as diverse as those of other streams in this region, it reflected good long-term water quality.

Water quality in surface streams in the vicinity of Blairsville is generally good and meets standards. High dissolved oxygen concentrations and low biochemical oxygen demand, nutrients, and fecal coliform bacterial densities have been reported.

Water quality throughout the vicinity of Blue Ridge is generally good for both surface and ground water. Surface waters are typically high in dissolved oxygen and low in biochemical oxygen demand, nutrients, and fecal coliform bacterial densities. Waters are in compliance with criteria of the water use classification of fishing.

Surface water quality in streams in and around Ringgold, Georgia is good. Data from EPD trend monitoring station indicated that the water of South Chickamauga Creek at Graysville, a short distance south of the Georgia-Tennessee state line, was of excellent quality in 1985 and 1986.

ENDANGERED AND THREATENED SPECIES

Reference No. 13

U.S. FISH AND WILDLIFE SERVICE

REGION 4 - ATLANTA

Federally Listed Species by State

GEORGIA

(E=Endangered; T=Threatened; CH=Critical Habitat determined)

Mammals	General Distribution
Bat, gray (Myotis grisescens) - E	Northwest, West
Bat, Indiana (Myotis sodalis) - E	Extreme Northwest
Manatee, West Indian (Trichechus manatus) - E	Coastal waters
Panther, Florida (Felis concolor coryi) - E	Entire state
Whale, finback (Balaenoptera physalus) - E	Coastal waters
Whale, humpback (Megaptera novaeangliae) - E	Coastal waters
Whale, right (Eubalaena glacialis) - E	Coastal waters
Whale, sei (Balaenoptera borealis) - E	Coastal waters
Whale, sperm (Physeter catodon) - E	Coastal waters
Birds	
Eagle, bald (Haliaeetus leucocephalus) - E	Entire state
Falcon, American peregrine (Falco peregrinus anatum) - E	North
Falcon, Arctic peregrine (Falco peregrinus tundrius) - T	Coast, Northwest
Plover, piping (Charadrius melodus) - T	Coast
Stork, wood (Mycteria americana) - E	Southeastern swamps
Warbler, Bachman's (Vermivora bachmanii) - E	Entire state
Warbler, Kirtland's (Dendroica kirtlandii) - E	Coast
Woodpecker, ivory-billed (Campephilus principalis) - E	South, Southwest
Woodpecker, red-cockaded (Picoides (=Dendrocopos) borealis) - E	Entire state
Reptiles	
Alligator, American (Alligator mississippiensis) - T(S/A)*	Coastal plain
Snake, eastern indigo (Drymarchon corais couperi) - T	Southeast

*Alligators are biologically neither endangered nor threatened. For law enforcement purposes they are classified as "Threatened due to Similarity of Appearance." Alligator hunting is regulated in accordance with State law.

GEORGIA (cont'd)

	General Distribution
Turtle, Kemp's (Atlantic) ridley (Lepidochelys kempii) - E	Coastal waters
Turtle, green (Chelonia mydas) - T	Coastal waters
Turtle, hawksbill (Eretmochelys imbricata) - E	Coastal waters
Turtle, leatherback (Dermochelys coriacea) - E	Coastal waters
Turtle, loggerhead (Caretta caretta) - T	Coastal waters
Fishes	
Darter, amber (Percina antesella) - E,CH	Conasauga R., Murray County
Darter, snail (Percina tanasi) - T	S. Chickamauga Cr., Catoosa County
Logperch, Conasauga (Percina jenkinsi) - E,CH	Conasauga R., Murray County
Sturgeon, shortnose (Acipenser brevirostrum) - E	Coastal rivers
Plants	
Baptisia arachnifera (hairy rattleweed) - E	Wayne, Brantley Counties
Isotria medeoloides (small whorled pogonia) - E	Rabun County
Lindera melissifolia (pondberry) - E	Wheeler County
Oxypolis canbyi (Canby's dropwort) - E	Burke, Lee, Sumter Counties
Sarracenia oreophila (green pitcher plant)- E	Towns County
Scutellaria montana (large-flowered skullcap) - E	Floyd, Gordon, Walker Counties
Torreya taxifolia (Florida torreya) - E	Decatur County
Trillium persistens (persistent trillium) - E	Tallulah-Tugaloo River system, Rabun and Habersham Counties

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

BATTLEFIELD PARKWAY AMMO
EPA SITE NUMBER GAD981931322
FT. OGLETHORPE
CATOOSA COUNTY, GA
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY GREG THOMAS
OF NUS CORPORATION
ON 11/30/89

DATE OF THIS REPORT: 12/05/89
DATE OF LAST MODIFICATION: 12/05/89

GROUND WATER ROUTE SCORE	:	4.49
SURFACE WATER ROUTE SCORE	:	7.27
AIR ROUTE SCORE	:	0.00
MIGRATION SCORE	:	4.94

HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	45 FEET		
DEPTH TO BOTTOM OF WASTE	6 FEET		
DEPTH TO AQUIFER OF CONCERN	39 FEET	2	4
PRECIPITATION	52.0 INCHES		
EVAPORATION	39.0 INCHES		
NET PRECIPITATION	13.0 INCHES	2	2
PERMEABILITY	1.0X10-3 CM/SEC	2	2
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			11
3. CONTAINMENT		3	3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE:ASSIGNED VALUE,18			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
GROUND WATER USE		1	3
DISTANCE TO NEAREST WELL	> 3 MILES		
AND	MATRIX VALUE	0	0
TOTAL POPULATION SERVED	0 PERSONS		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			3

GROUND WATER ROUTE SCORE (Sgw) = 4.49

HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	1.1 %		
INTERVENING SLOPE	1.4 %	0	0
24-HOUR RAINFALL	3.3 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	2300 FEET	2	4
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			10
3. CONTAINMENT	3		3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE:ASSIGNED VALUE,18			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		0	0
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	NONE		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND	MATRIX VALUE	0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			6

SURFACE WATER ROUTE SCORE (Ssw) = 7.27

HRS AIR ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. WASTE CHARACTERISTICS			
REACTIVITY:		MATRIX VALUE	
INCOMPATIBILITY			
TOXICITY			
WASTE QUANTITY CUBIC YARDS			
DRUMS			
GALLONS			
TONS			
TOTAL			
TOTAL WASTE CHARACTERISTICS SCORE:			N/A
3. TARGETS			
POPULATION WITHIN 4-MILE RADIUS			
0 to 0.25 mile			
0 to 0.50 mile			
0 to 1.0 mile			
0 to 4.0 miles			
DISTANCE TO SENSITIVE ENVIRONMENTS			
COASTAL WETLANDS			
FRESH-WATER WETLANDS			
CRITICAL HABITAT			
DISTANCE TO LAND USES			
COMMERCIAL/INDUSTRIAL			
PARK/FOREST/RESIDENTIAL			
AGRICULTURAL LAND			
PRIME FARMLAND			
HISTORIC SITE WITHIN VIEW?			
TOTAL TARGETS SCORE:			N/A

AIR ROUTE SCORE (Sa) = 0.00

HAZARD RANKING SYSTEM SCORING CALCULATIONS
FOR
SITE: BATTLEFIELD PARKWAY AMMO
AS OF 12/05/89

GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		11
CONTAINMENT	X	3
WASTE CHARACTERISTICS	X	26
TARGETS	X	3

= 2574 /57,330 X 100 = 4.49 = S_{gw}

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		10
CONTAINMENT	X	3
WASTE CHARACTERISTICS	X	26
TARGETS	X	6

= 4680 /64,350 X 100 = 7.27 = S_{sw}

AIR ROUTE SCORE

OBSERVED RELEASE 0 /35,100 X 100 = 0.00 = S_{air}

SUMMARY OF MIGRATION SCORE CALCULATIONS

	S	S^2
GROUND WATER ROUTE SCORE (S_{gw})	4.49	20.16
SURFACE WATER ROUTE SCORE (S_{sw})	7.27	52.85
AIR ROUTE SCORE (S_{air})	0.00	0.00
$S^2_{gw} + S^2_{sw} + S^2_{air}$		73.01
$\sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})}$		8.54
$S_M = \sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})}/1.73$		4.94

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981931322

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Battlefield Parkway Ammo	Battlefield Parkway (Hwy. 2)

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Ft. Oglethorpe	GA	30742	Catoosa		

09 COORDINATES LATITUDE 34° 57′ 20.0″ LONGITUDE 85° 15′ 05.0″

10 DIRECTIONS TO SITE (Starting from nearest public road)

From I-75N go west on Battlefield Parkway (Hwy. 2). Site is about 1 mile past Ft. Oglethorpe city limits on the right. Site area is now a mini-storage facility and an oil change garage.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER

13 TYPE OF OWNERSHIP (Check one)

☐ A. PRIVATE ☐ B. FEDERAL ______ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER ______ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103c) DATE RECEIVED ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☐ YES

☒ NO DATE 11/28/89

BY (Check all that apply) ☐ A. EPA ☒ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR ☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER ______ (Specify)

CONTRACTOR NAME(S) NUS CORPORATION

02 SITE STATUS (Check one)

☐ A. ACTIVE ☒ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION 1903 (BEGINNING YEAR) 1950 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Silonizing agent composed of organic chloride, hydrogen chloride and old ammunition.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Area is allegedly clean. Most of the site area is now paved over. If more chemicals are buried there; there is potential of leakage into groundwater. However, this would not affect the population in the area.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required promptly) ☐ C. LOW (Inspect on time available basis) ☒ D. NONE (No further action needed, complete disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Mario Villamarzo 02 OF (Agency/Organization) EPA 03 TELEPHONE NUMBER (404) 347-5065

04 PERSON RESPONSIBLE FOR ASSESSMENT Greg Thomas 05 AGENCY NUS 06 ORGANIZATION FIT 07 TELEPHONE NO. 404-938-7710 08 DATE 12 6 89

Catoosa Co, GA

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

28 MAR 1989

CEEC-EB (200-1a)

MEMORANDUM THRU ENVR

MEMORANDUM TO DAEN-ZCZ-B

SUBJECT: DERP for Formerly Used Defense Sites Inventory Project Report for Project No. I04GA000201

1. We are providing for your information and approval the Inventory Project Report for Project No. I04GA000201 Battlefield Parkway Site, Fort Oglethorpe, Catoosa County, Georgia (enclosure 1). This site was formerly used by the U.S. Army.

2. Small caliber ordnance and chemical filled bottles, discovered during construction activities, were removed by the U.S. Army Emergency Ordnance Division and the EPA emergency response team respectively.

3. Request authority to sign an IAG with EPA which commits USACE to reimburse EPA in the amount of $12,594.11.

4. We have notified EPA that we are seeking authority and funds. We are modifying our FY89 work plan in anticipation of your prompt approval.

5. POC for this office is Art Shacter (202) 272-8602.

Lloyd A. Duscha
Deputy Director
Directorate of Engineering
and Construction

CF: CEHND-ED w/encl
CESAD-PD-R w/encl
DESOH w/encl

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FOR FORMERLY USED SITES
INVENTORY PROJECT REPORT
BATTLEFIELD PARKWAY SITE
FORT OGLETHORPE, CATOOSA COUNTY, GEORGIA
PROJECT NUMBER I04GA000201

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PART I - PROJECT DESCRIPTION

PROJECT DESCRIPTION
BATTLEFIELD PARKWAY
FORT OGLETHORPE, CATOOSA COUNTY, GEORGIA
PROJECT NO. I04GA000201

1. INTRODUCTION

The Savannah District initiated an investigation and inventory of hazardous materials at the Battlefield Parkway Site, located within the boundaries of the former Fort Oglethorpe U.S. Army post, a former Department of Defense (DOD) property, in March 1988. The investigation was initiated as a result of the discovery of toxic chemicals and small arms ammunition rounds during construction at the site by the owner. After being notified of the hazardous materials by the construction contractor, local officials contacted EPA Region IV; who, in turn, immediately dispatched an emergency response team to investigate the site. The U.S. Army's Emergency Ordnance Division at Fort Gillem, Georgia (EOD), investigated, removed, and disposed of the small arms ammunition rounds. The EPA's Emergency Response Contracting Service contractor removed and disposed of the hazardous/toxic chemicals.

2. PROJECT DESCRIPTION

Small arms ammunition rounds and approximately 25 bottles of unknown black chemical liquid were exposed by construction activities at the site. From March 10 to March 28, 1988, emergency remedial actions were taken by EPA's Emergency Response Contracting Service contractor and the EOD. The chemicals were tested by EPA and found to be a toxic organic chloride and a possible siliconizing agent. Both the ammo rounds and the toxic chemicals were determined by the EOD and EPA to be likely related to DOD use of the property.

3. DESCRIPTION OF SITE

The parcel of land occupied by the Battlefield Parkway Site was part of the fee-owned lands at Land Lot Nos. 96 and 97, Fort Oglethorpe Army Post, a former DOD property.

ATTACHMENT 1 - Site Survey Summary Sheet

SITE SURVEY SUMMARY SHEET
FOR
PROJECT NO. I04GA000201

SITE NAME: Battlefield Parkway Site.

LOCATION: Fort Oglethorpe, Catoosa County, Georgia.

DESCRIPTION OF PROBLEM: Hazardous/toxic materials, consisting of toxic chemicals and small arms ammunition rounds, were discovered by the owner during construction at the site. EPA Region IV, responding with an emergency response action, investigated the problem and eventually contracted to have the hazardous/toxic chemicals removed and disposed of. The U.S. Army's Emergency Ordnance Division at Fort Gillem, Georgia, investigated, removed, and disposed of the small arms ammunition rounds. No additional hazards are known at the site.

SITE HISTORY: Fort Oglethorpe was originally established as an Army post in 1902, and from 1919 to 1942, was the permanent home of the Sixth Cavalry. During World War II, it's primary use was as the Training Center for the Women's Third Army Corps (WAC). Other than the possible use of grazing and exercising horses, no specific former DOD use has been described for the part of Fort Oglethorpe occupied by the Battlefield Parkway Site (Land Lot Nos. 96 and 97).

AVAILABLE STUDIES AND REPORTS: EPA report: "Battlefield Parkway Ammo Dump, Ft. Oglethorpe, After Action Report, Emergency Removal Action". U.S. Environmental Protection Agency, Region IV, Atlanta, Georgia.

CATEGORY OF HAZARD: Approximately 25 bottles of toxic organic chloride and ordnance (small arms: 30 and 50 caliber shell ammunition).

BASIS OF DETERMINATION OF DOD RESPONSIBILITY: Toxic chemicals and ammunition rounds are thought to be types used by DOD at Fort Oglethorpe, a former DOD property.

POC/DISTRICT: John Jameson, CESAS-PD-EC, telephone: 912-944-5834, Savannah District.

STATUS: The site is currently owned locally by F.M.S. Development Corporation, Mr. Jack W. Kidd, Manager.

DESCRIPTION OF PROPOSED REMEDIAL ACTION: Emergency remedial action was taken by EPA and the Emergency Ordnance Division at Fort Gillem, Georgia, from March 10 to March 28, 1988. No additional hazards are known for the former DOD used site. Funding is needed to reimburse EPA for costs incurred.

COST: $12,594.11

ATTACHMENT 2 - Cost Estimate (EPA Itemized Bill)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

NOV 0 9 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

4WD-SISB/BH

Mr. Dennis Barnett
U.S. Army Corps of Engineers
South Atlantic Division
CESAD-PD-R
Room 313
77 Forsyth Street
Atlanta, Georgia 30335-6801

RE: Request for Payment Pursuant to Section 107 of CERCLA for Battlefield Parkway Site, Ft. Oglethorpe, Georgia

Dear Mr. Barnett:

The United States Environmental Protection Agency (EPA) has expended public funds under Superfund to investigate and take corrective [redacted] for the control of releases of hazardous substances that were discovered March 9, 1988 by the present owner of the above-referenced site. The Battlefield Parkway site (hereinafter the "Site") consisted of a vacant lot, formerly owned by the Army, in which chemical bottles and rounds of caliber shells were found during property development activities. The Site is located at 522 Battlefield Parkway in Ft. Oglethorpe, Georgia.

Upon discovery of the bottles and shells, the owner notified the Georgia Environmental Division, who in turn notified the EPA. In accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Section 9601 et seq., EPA undertook response action using funds provided for such actions. The action began on or about March 10, 1988 and continued to March 29, 1988. EPA's investigation revealed that the hazardous substances were potentially explosive munitions and chemicals classified as siliconizing agents determined to be corrosive and reactive in nature. EPA's response action entailed planning, excavation of bottles and contaminated soil, and removal and proper disposal. The shells were also removed.

EPA was assisted in this site investigation and removal action by the South Atlantic Division of the Army Corps of Engineers, the Explosive Ordnance Detachment, Fort Gillem, EPA's Technical Assistance Team (TAT) and EPA's Emergency Response Contractor Service (ERCS). An attached EPA memorandum by On-Scene Coordinator Kelly S. McCarty summarizes the emergency actions performed.

Responsible parties under CERCLA include current and past owners and operators, as well as persons who generated the hazardous substances or were involved with the transport, treatment or disposal of them. EPA with the assistance of Marc Rucker, CESAD-PD-R, and Mr. Jim Simpson, CESAS-RE-MM, has verified that the Department of Defense (DOD) operated and owned a U.S. Army Post at the Site from 1903 until 1950. By this letter, EPA intends to notify you under Section 107(a) of CERCLA of your potential liability for any costs incurred by the government in taking corrective actions at the Site, and to request payment of EPA incurred costs at the Site.

The EPA hereby requests that the Army Corps of Engineers agree to reimburse the EPA the sum of $12,594.11. The latest breakdown of costs is shown in Attachment A.

Enclosed is a Settlement Agreement prepared pursuant to Section 122(h) of CERCLA. This Agreement reflects EPA's incurred costs to date. The Agency is willing to settle with you for this amount if you sign this Agreement within thirty days (30) of your receipt of this letter. If you do not sign within this time frame, additional administrative costs may be added to the total amount due.

Mr. Greer C. Tidwell, EPA's Region IV Administrator, will also sign this Agreement in accordance with CERCLA Section 122(h). This Agreement, when signed, will be published in the Federal Register which shall initiate a thirty (30) day public comment period. At the completion of the thirty (30) day period the agreement will be in effect. Within [redacted] days of the effective date, payment should be made into the Hazardous Substance Superfund by certified or cashier's check payable to:

United States Environmental Protection Agency - Region IV
Superfund Accounting
P.O. Box 100142
Atlanta, Georgia 30384
Attention: Collection Officer for Superfund

A copy of the certified or cashier's check and its transmittal letter should be sent to Brian Holtzclaw, Cost Recovery Unit, at the following address:

U.S. Environmental Protection Agency
Investigation Support Section
Waste Management Division
345 Courtland Street, N.E.
Atlanta, Georgia 30365
404/347-5059

We hereby request that you make restitution by payment of the amount stated herein. If you desire to discuss your liability with EPA, please contact the person named below in writing not later than ten (10) days after your receipt of this letter to notify her of your present understanding and intent. Send the notification to:

Ms. Gail Baylor
Assistant Regional Counsel
Office of Regional Counsel
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

If you need further information, Ms. Baylor can be reached by telephone at 404/347-2641. Any technical questions should be directed to Mr. Brian Holtzclaw at 404/347-5059.

EPA is committed to recover costs from responsible parties at Superfund sites. The Agency appreciates your willingness and cooperation to complete the Settlement Agreement and payment within the time frame requested herein.

Sincerely yours,

Patrick M. Tobin

Patrick M. Tobin
Director
Waste Management Division

Enclosure

PREPARED: 11-5-88

BREAKDOWN OF COSTS INCURRED BY THE FEDERAL GOVERNMENT AT
BATTLEFIELD PARKWAY SITE, FT. OGLETHORPE, GEORGIA
SITE ID 4 BP

EPA EXPENDITURES	GRAND TOTAL
EPA REGIONAL PAYROLL	$ 1,157.79
EPA REGIONAL TRAVEL	258.53
EPA REGIONAL INDIRECT COSTS	3,096.00
EMERGENCY REMOVAL CLEANUP SERVICES (ERCS) CONTRACT 68-01-7404	8,081.79
TOTAL EPA EXPENDITURES	$ 12,594.11

APR 7 1989

MEMORANDUM

TO: ADDRESSEES

FROM: KELLY S. McCARTY,
EPA ON-SCENE COORDINATOR

SUBJECT: REMOVAL ACTION AT BATTLEFIELD PARKWAY AMMO DUMP, FT. OGLETHORPE, GA

The removal action was undertaken by EPA to alleviate a threat posed by several bottles of an unknown chemical and several rounds of ammo on the surface of the site. The EPA and the Corps of Engineers, representing the Army, are currently in the process of signing an Interagency Agreement (IAG), whereby the Corps will reimburse EPA for the costs incurred in cleaning up the site.

The site was discovered on March 9, 1988, when contractors performing some grading work on the site uncovered the bottles and ammo. The Georgia EPD was called, who in turn called EPA, on March 10. On March 11, EPA and representatives from the Army's Explosive Ordinance Division (EOD) visited the site for an inspection. EOD removed the ammo and the EPA proceeded to find out who was responsible for the bottles being on the site. EPA's Technical Assistance Team (TAT) was called in to recon the site and provide historical search assistance and to stabilize the site as much as possible to avoid any threat to public.

A Regional Response Team (RRT) meeting was called for March 14, to notify all the interested/responsible parties and decide what steps would be taken next. The meeting was adjourned to take the information back to superiors. EPA then called in the ERCS cleanup contractor to sample the bottles and to provide for 24-hour security for the site beginning March 15. The RRT meeting was readjourned in Fort Oglethorpe on March 18, to inform local officials of the impending actions/cleanup.

On March 28, the removal action was officially begun, even though the IAG had not yet been signed by the Corps of Engineers. On March 29, several test pits were dug about the surface of the site to determine the extent of contamination of the bottles. No other bottles or ammo were found on the site during this investigation. Based upon the sampling that was performed earlier, the best guess that EPA has regarding the identity of the material is that it was some sort of horse medicine either used in treating hooves or as a cough medicine. The material in the bottles was found to be reactive with the soil so a pit was dug and the bottles were crushed and reacted in it. All the soil in the pit and around it was scooped up and put into a 55-gallon drum, even though the material was then non-hazardous since it had already been reacted.

[illegible] of either [illegible] actions at [illegible]

ADDRESSEES

Walter Brandon
City of Ft. Oglethorpe
Ft. Oglethorpe, GA 30742

Marc D. Rucker
U.S. Army Corps of Engineers
510 Title Bldg.
30 Pryor St. NW
Atlanta, GA 30303

Jimmy Kirkland
GA EPD - Suite 1166
205 Butler Street
Atlanta, GA 30334

Joseph L. Camp
U.S. Dept. of Labor/ OSHA
Lavista Perimeter Office Park
Building 10, Suite 33
Tucker, GA 30084
ATTN: George Bradley

ATTACHMENT 3 - Site Photographs

Photo 1. Construction Area at Battlefield Parkway Site, Project No. I04GA000201

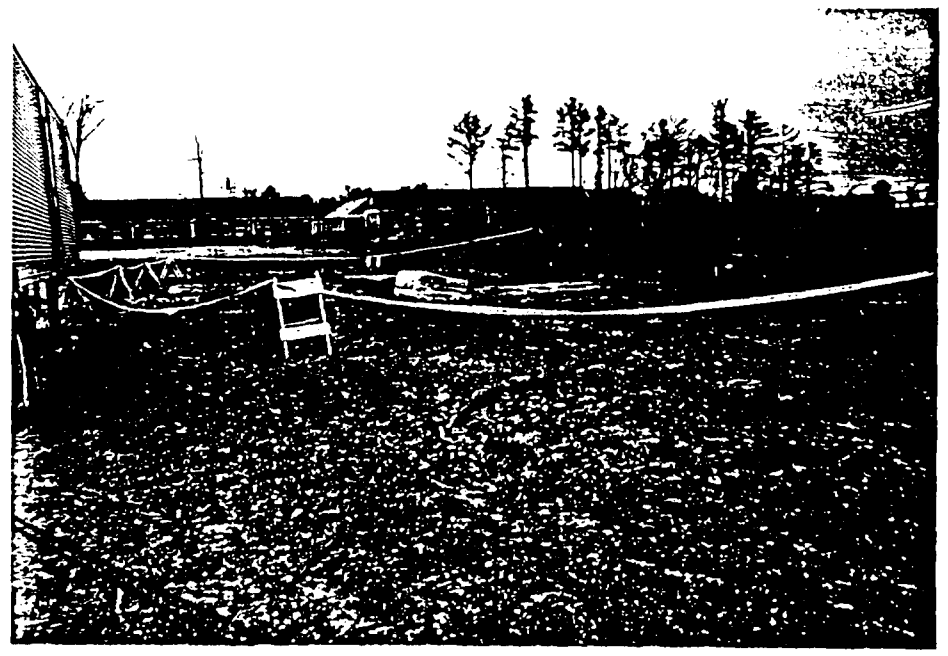

Photo 2. Construction Area at the Battlefield Parkway Site

PART II - FINDINGS AND DETERMINATION OF ELIGIBILITY

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FOR FORMERLY USED SITES
FINDINGS AND DETERMINATION OF ELIGIBILITY
BATTLEFIELD PARKWAY SITE
FORT OGLETHORPE, CATOOSA COUNTY, GEORGIA
PROJECT NO. I04GA000201

FINDINGS OF FACT

1. The Battlefield Parkway Site is located on the former Fort Oglethorpe, a U.S. Army installation located in Catoosa and Walker Counties, approximately 8 miles south of Chattanooga, Tennessee, in extreme northwest Georgia. Small arms ammunition rounds and approximately 25 bottles of unknown black chemical liquid were exposed by construction activities at the site. From March 10 to March 28, 1988, emergency remedial actions were taken by EPA's Emergency Response Contracting Service contractor and the Emergency Ordnance Division, Fort Gillem, Georgia (EOD). The chemicals were tested by EPA and found to be a toxic organic chloride and a possible siliconizing agent. Both the ammo rounds and the toxic chemicals were concluded by the EOD and EPA to be likely related to DOD use of the property. Other portions of the former Fort Oglethorpe installation are being addressed separately for the Defense Environmental Restoration Program as Project No. I04GA000202.

2. Between 1902 and 1947, the U.S. Government acquired a total of 1,004.56 acres, of which 810.56 acres fee were acquired by purchase and condemnation. The remaining 194.00 acres were a portion of the Chickamauga and Chattanooga National Military Park, and were transferred to the War Department by use permit from the Department of the Interior. The parcel of land occupied by the Battlefield Parkway Site was part of the fee-owned lands at Land Lot Nos. 96 and 97.

3. Fort Oglethorpe was originally established by the War Department on the site of the Spanish-American War era Camp Thomas, within the boundaries of the Chickamauga and Chattanooga National Military Park. Permanent construction and development of Fort Oglethorpe as a major military post began in 1902. By 1918, with the mobilization associated with World War I, more than 1600 buildings or structures had been built, and 60,000 troops had been mobilized through the post. From 1919 to 1942, Fort Oglethorpe was the permanent home of the Sixth Cavalry. During the middle and later years of World War II, the post served a variety of purposes, including an induction center, a Provost Marshall School, a prisoner of war camp, and, finally, from 1943 to 1945, it was the Women's Third Army Corps (WAC) Training Center. In July of 1945, the WAC center was closed and the post became a distribution center for returning soldiers, the last official military mission of Fort Oglethorpe prior to it's deactivation.

4. Effective 31 December 1946, Fort Oglethorpe was declared surplus to Army needs. On 21 June 1947, custody of the installation was accepted by the War Assets Administration. By October 1949, the acreages acquired by Use Permit from the Department of the Interior had been terminated. The remaining 810.56 acres of fee-owned lands were sold by the War Assets Administration to public

agencies, private business, and individuals. The parcel of fee-owned land occupied by the Battlefield Parkway Site (Land Lot Nos. 96 and 97) contains 2 acres and since October 1987, has been owned by F.M.S. Development Corporation. The previous owners of the site, beginning in 1949, were: the East Tennessee Company (1949-1954); L.O. Ledford and G.H. Gilbert (1954-1970); Norma G. and Brenda B. Gilbert (1970-1973); and Nicholas R. Nichols (1973-1987).

5. The Battlefield Parkway site property identified during the inventory investigation has not been used since DOD disposed of the site. There is no evidence of unsafe debris, hazardous or toxic waste, or unexploded ordnance resulting from DOD use of the site, other than that described by EPA.

DETERMINATION

Based on the foregoing findings of fact, the site as described above has been determined to be a formerly-used DOD property. Moreover, it is determined that an Environmental Restoration Project, to the extent set out herein, is an appropriate undertaking within the purview of the Defense Environmental Restoration Program, established under 10 U.S.C. 2701 et seq., for the reasons stated above.

28 Jan 87
DATE

LLOYD A. DUSCHA, P.E.
Deputy Director
Directorate of Engineering
and Construction

PART III - POLICY CONSIDERATIONS

POLICY CONSIDERATIONS
BATTLEFIELD PARKWAY SITE
FORT OGLETHORPE, CATOOSA COUNTY, GEORGIA
PROJECT NUMBER I04GA000201

Current DOD policy considerations do not affect the determination of project eligibility for hazardous and toxic waste removal under the DERP program. Although the hazardous/toxic chemicals and ordnance have been removed and disposed of, compensation to EPA for costs incurred is appropriate.

PART IV - PROJECT RECOMMENDATIONS

PROJECT RECOMMENDATIONS
BATTLEFIELD PARKWAY SITE
FORT OGLETHORPE, CATOOSA COUNTY, GEORGIA
PROJECT NO. I04GA000201

Since the hazardous materials discovered at the site have been determined to be directly related to DOD use, and therefore fall under the purview of the Defense Environmental Restoration Program, compensation/reimbursement of expenses incurred by EPA at the site is recommended.